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## **MANAGEMENT OF USED ANTIFREEZE**

### **Technical Guidance Document HW 97- 02**

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A number of questions have arisen regarding the regulatory status of used antifreeze. While used antifreeze is not a listed hazardous waste under either federal or state regulations, it can be classified as a characteristic hazardous waste due to the presence of metals and/or other contaminants. The most common contaminant is lead and is most likely the result of the use of this metal in radiator construction. Occasional other contaminants include cadmium, selenium, benzene, and perchloroethylene. Contaminant concentrations vary greatly and past testing by the department has revealed that approximately 40 percent of samples analyzed for TCLP constituents fail for one or more of these contaminants.

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Manufacturers of late-model cars and trucks now are using less lead in radiator construction and have ceased testing engine blocks with perchloroethylene. As a result TCLP failure rates are probably significantly declining. The cost of TCLP analyses can be significant, especially for small generators of used antifreeze such as automotive repair shops. As a result, requiring frequent TCLP analyses on used antifreeze would be burdensome. In addition, options for recycling used antifreeze are becoming more common.

As a result of these factors, KDHE is adopting a new policy with respect to used antifreeze. The generators of used antifreeze who intend to recycle this material either on-site or through a legitimate commercial recycling service, will no longer need to conduct TCLP analyses. In-state recyclers of antifreeze that collect from multiple commercial sources must be permitted as a solid waste facility by KDHE.

KDHE will not view antifreeze destined for recycling as a potential hazardous waste and the used antifreeze can be transported under a bill of lading or contractual arrangement rather than under a hazardous waste manifest. As the used antifreeze is accumulated it should be stored in closed containers labeled with the words "Used Antifreeze". Any business generating or accumulating used antifreeze is strongly encouraged not to mix the antifreeze with waste oil or any potential hazardous waste. Mixing other wastes into the used antifreeze may render the mixture hazardous

or may make it more difficult to recycle. However, should a third party offering antifreeze recycling services wish to mix used antifreeze on collection trucks prior to transport, such a practice is acceptable.

Testing will continue to be required for antifreeze that is not being recycled and all applicable generator requirements for management of hazardous wastes apply. In addition, it should be noted that users of on-site antifreeze distillation or recycling systems must characterize any residues including still bottoms and/or filters to determine if they are hazardous waste. If such residues are hazardous they must be managed in accordance with all applicable hazardous waste regulations.

KDHE encourages the prudent recycling of all used antifreeze. If a batch of non-recycled antifreeze has been tested and determined to be nonhazardous, it may be solidified to the point that no free liquids remain, and the waste may then be disposed of at a permitted sanitary landfill. Also, if the generator's facility is connected to the sanitary sewer that discharges to a Publicly Owned Treatment Works (POTW) and the waste will mix with domestic sewage, the waste antifreeze may be disposed (without prior testing) in the sanitary sewer on-site provided written authorization from the operators of the POTW is obtained. Records of such authorizations must be maintained by the generator. Waste antifreeze may never be discharged to storm

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sewers, septic systems, water ways, or be discharged on the ground.

In summary, acceptable management practices for used antifreeze include the following:

- recycling, either on- or off-site;
- management as hazardous waste;
- disposal via the sanitary sewer (with written authorization only); and
- if non-hazardous, solidification and disposal at a permitted solid waste management facility.

### **Additional Information**

These are general guidelines only. For information regarding any specific or different management options, you may contact the Bureau of Waste Management at (785)296-1600 or at the address at the top of this document. This document and additional information are also available on BWM's website: [www.kdhe.state.ks.us/waste](http://www.kdhe.state.ks.us/waste).